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PURSH'S REPORT OF DRYAS FROM NEW HAMPSHIRE.

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IN his *Flora Americae Septentrionalis* Pursh described in 1814 *Dryas tenella* from "the white hills of New Hampshire. Prof Peck. . . . July. v. s. in *Herb. Banks*"<sup>1</sup>; and since that time American botanists have sought in vain for the plant and have wished in vain to know Peck's station in the "White Hills."

Pursh's description clearly places his plant with the earlier *Dryas integrifolia*, Vahl, of Greenland, and under this name it was taken up by Dr. Gray in five editions of his Manual, though, for some unaccountable reason, in the sixth edition Watson and Coulter altered the name and description to *D. octopetala*.

Three species of *Dryas* are generally recognized in high northern regions, all of them occurring in North America. *D. octopetala*, L., the only species of Europe, reappears in the mountains and on the coast of northwestern America, but is thus far unknown east of the Rocky Mountains. *D. integrifolia*, Vahl, with entire or subentire leaves and white petals, is definitely known from Greenland across Arctic America to Behring Straits, and south in the East to Newfoundland and Anticosti Island, Quebec. *D. Drummondii*, Richardson, the largest and handsomest of the genus, with coarsely toothed leaves and yellow petals, grows on sandy and gravelly shores in the northern Rocky Mountains, on Anticosti Island, and by the rivers of Gaspé County, Quebec.

According to Pursh's statement the original material of his *Dryas tenella* was collected by Prof. Peck<sup>2</sup> "on the white hills of New

<sup>1</sup> Pursh, Fl. 350.

<sup>2</sup> William Dandridge Peck, Massachusetts Professor of Natural History, Harvard College, 1805-1822.



Hampshire," and was in the herbarium of Sir Joseph Banks. During the past summer, therefore, the writer was interested to examine the material of *Dryas* in the Banksian Herbarium at the British Museum of Natural History. No material from Peck was found, and the only sheet clearly belonging in the original Banksian Herbarium was marked *Dryas tenella*, Pursh. This sheet contains three specimens, with the data indicated on the back of the sheet, two of the specimens collected before the publication of Pursh's species, the other a comparatively modern one from Labrador. The two older collections are from "1. Newfoundland, Ingle Island in the mouth of the harbour J. B[anks],"<sup>1</sup> and "2. Labrador, D. Nelson 1781."

Although there is the barest possibility that a Peck specimen may have once existed and is now lost, the fact that for nearly a century so conspicuous a plant as *Dryas integrifolia* has been sought in vain by the botanical explorers who have scoured the "White Hills" of New Hampshire, has long since thrown doubt upon the accuracy of Pursh's original data. Furthermore, since Pursh cited a specimen in the Banksian Herbarium and since there is in that Herbarium a plant which well agrees with the description of *D. tenella* and is so labeled, it seems still more probable that Pursh was in error in citing the plant from New Hampshire. As a result of examination of the data now at hand the following suggestion is offered as possibly explaining the source of error.

A detailed study of the charts of the United States Hydrographic Survey shows only one island on the Newfoundland coast which could have been intended by Banks as "Ingle" Island. This is Englée or Grévigneux,<sup>2</sup> a steeply scarped island hardly a mile in length, with its nine naked summits nearly hiding the entrance to Bide Arm, the northernmost fjord of Canada Bay. Directly west from Grévigneux (Englée) there rise from the shore of Canada Bay the Cloud Hills, 1195 feet high, an eastern lobe of the Long Range, which forms the backbone of western and northern Newfoundland and northward is generally referred to indefinitely as the White Hills; though in its most restricted sense the name White Hills is confined to the northernmost extension of the Long Range about Hare Bay, twenty-five miles north of Grévigneux (Englée) Island.

<sup>1</sup> Collected during the "voyage to Newfoundland and Labrador commencing April ye 7th and ending November ye 17th, 1766."

<sup>2</sup> See U. S. Hydrographic Survey Chart no. 794.



During the preparation of his Flora Pursh was associated with Banks,<sup>1</sup> who would naturally tell him of that portion of North America (Newfoundland and Labrador) which he, Banks, had explored but which Pursh had never seen. It is most probable that the White Hills were mentioned by Banks who had collected the Dryas on a rugged island off shore from some of the principal peaks of that range, and that Pursh, to whom Newfoundland was an unfamiliar region, confused the Newfoundland mountains with the "White Hills of New Hampshire," whose alpine plants were familiar to him through the collections of Peck.<sup>2</sup> This very natural error is rendered more probable by the fact that the data accompanying the Banksian plant is on the reverse side of the large herbarium-sheet and is not apparent to the hasty observer. And Pursh must have made hasty observations and notes; for the tremendous work of actually preparing his Flora was accomplished with almost unprecedented speed, in less than two years, during which time he not only organized his own material and notes secured during twelve years in America and examined among others the herbaria of Banks, Lambert, Clayton, Pallas, Plukenet, Catesby, Morison, Walter, and Sherard, but was constantly handicapped by the restless spirit which controlled his entire life.<sup>3</sup>

In view, then, of the evidence derived from the Banksian Herbarium there is little question that the original *Dryas tenella* came from an island close under the White Hills of northern Newfoundland, and that Pursh was in error in crediting it to New Hampshire. Should the plant be found hereafter on our own "White Hills" it may be safely considered a new discovery.

#### GRAY HERBARIUM.

<sup>1</sup>"Sir Joseph Banks, with his accustomed liberality, supported my undertaking by giving me access to his extensive library and herbarium."—Pursh, l. c. xvi.

<sup>2</sup>"During my journey [from Wiscasset] towards New York, I had an opportunity of visiting Professor Peck of Cambridge College near Boston, and seeing his highly interesting collection of plants, collected on a tour to the alpine regions of the White Hills of New Hampshire. As the season was too far advanced when I was in that country to suffer me to think of ascending those mountains, this collection was highly gratifying to me."—Pursh, l. c. xv.

<sup>3</sup>"The whole study must have been rapid. The despatch is wonderful. One can hardly understand the ground of the statement made by Lambert to my former colleague, Dr. Torrey, that he was obliged to shut Pursh up in his house in order to keep him at his work."—Gray, Am. Jour. Sci. 3, xxiv, 325.